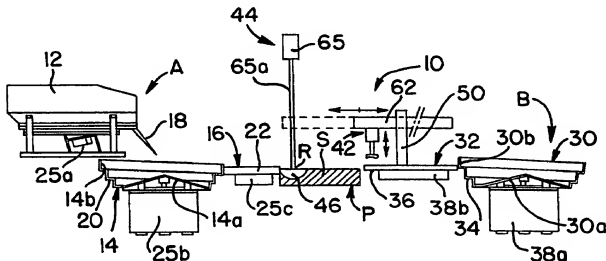




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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|---|--|----|--|
| (51) International Patent Classification 6 : B25C 1/04, A41H 37/02 | | A3 | (11) International Publication Number: WO 98/43781 |
| | | | (43) International Publication Date: 8 October 1998 (08.10.98) |
| (21) International Application Number: PCT/US98/05909 | | | (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). |
| (22) International Filing Date: 24 March 1998 (24.03.98) | | | |
| (30) Priority Data: 97/03847 28 March 1997 (28.03.97) FR | | | |
| (71) Applicant (for all designated States except US): SENSOR-MATIC ELECTRONICS CORPORATION [US/US]; 951 Yamato Road, Boca Raton, FL 33431-0700 (US). | | | |
| (72) Inventors; and (75) Inventors/Applicants (for US only): GOUELBO, Didier [FR/FR]; 3, rue de Bourgneuf, F-78720 Cernay-la-Ville (FR). DAMEME, Alain [FR/FR]; 10, rue Saint Nicolas, F-78640 Neauphle-le-Château (FR). | | | |
| (74) Agent: LEVIN, Nathaniel; Robin, Blecker & Daley, 330 Madison Avenue, New York, NY 10017 (US). | | | Published With international search report. |
| | | | (88) Date of publication of the international search report: 3 December 1998 (03.12.98) |

(54) Title: SEMI-AUTOMATIC APPARATUS FOR AFFIXING AN ANTI-THEFT DEVICE TO AN ARTICLE



(57) Abstract

A semi-automatic machine (10) for affixing an anti-theft device (1), such as an EAS marker, to an article of clothing or the like. The anti-theft device (1) is of the type made up of two elements (4, 5) that are to be snapped together through the article of clothing. Each of the two kinds of elements (4, 5) is stored in a respective vibrating bowl (14, 30) and transferred to an assembly station (P) by a respective vibrating conveyor (16, 32). One of the two elements (4, 5) is positioned on a working surface (S) at the assembly station (P). The second element (4, 5) is taken up by a snap-connection mechanism. A laser (44) provides a reference mark at the working surface (S) so that an operator can precisely position a desired part of the article of clothing for receiving the anti-theft device (1).

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/05909

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : B25C 1/04; A41H 37/02
US CL : 227/18, 119, 137; 292/318

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 227/15, 18, 67, 107, 119, 130, 135, 137, 156; 292/307R, 318

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
noneElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
none

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 4,090,652 A (SILVERBUSH) 23 May 1978, See entire document. | 1-11 |
| A | US 4,536,933 A (FURUTSU) 27 August 1985, See entire document. | 1-11 |
| A | US 4,588,218 A (GUILER et al.) 13 May 1986, See entire document. | 1-11 |
| A | US 4,605,150 A (IKEHARA) 12 August 1986, See entire document. | 1-11 |
| A | US 5,775,566 A (KOCHS et al.) 07 July 1998, See entire document. | 1-11 |



Further documents are listed in the continuation of Box C.



See patent family annex.

| | |
|---|--|
| * Special categories of cited documents: | *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
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| *O* document referring to an oral disclosure, use, exhibition or other means | |
| *P* document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search

04 SEPTEMBER 1998

Date of mailing of the international search report

29 SEP 1998

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SCOTT A. SMITH

Telephone No. (703) 305-2190

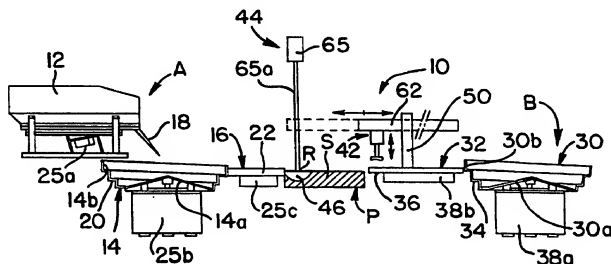
Shella Venes
Paralegal Specialist
Technology Center 3700



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <p>(21) International Application Number: PCT/US98/05909</p> <p>(22) International Filing Date: 24 March 1998 (24.03.98)</p> <p>(30) Priority Data: 97/03847 28 March 1997 (28.03.97) FR</p> <p>(71) Applicant (for all designated States except US): SENSOR-MATIC ELECTRONICS CORPORATION [US/US]; 951 Yamato Road, Boca Raton, FL 33431-0700 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): GOUELIBO, Didier [FR/FR]; 3, rue de Bourgneuf, F-78720 Cernay-la-Ville (FR). DAMEME, Alain [FR/FR]; 10, rue Saint Nicolas, F-78640 Neauphle-le-Château (FR).</p> <p>(74) Agent: LEVIN, Nathaniel; Robin, Blecker & Daley, 330 Madison Avenue, New York, NY 10017 (US).</p> | | <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p> <p>(88) Date of publication of the international search report: 3 December 1998 (03.12.98)</p> |

(54) Title: SEMI-AUTOMATIC APPARATUS FOR AFFIXING AN ANTI-THEFT DEVICE TO AN ARTICLE



(57) Abstract

A semi-automatic machine (10) for affixing an anti-theft device (1), such as an EAS marker, to an article of clothing or the like. The anti-theft device (1) is of the type made up of two elements (4, 5) that are to be snapped together through the article of clothing. Each of the two kinds of elements (4, 5) is stored in a respective vibrating bowl (14, 30) and transferred to an assembly station (P) by a respective vibrating conveyor (16, 32). One of the two elements (4, 5) is positioned on a working surface (S) at the assembly station (P). The second element (4, 5) is taken up by a snap-connection mechanism. A laser (44) provides a reference mark at the working surface (S) so that an operator can precisely position a desired part of the article of clothing for receiving the anti-theft device (1).

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PATENT COOPERATION TREATY

PCT

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(PCT Rule 61.2)

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| | |
|---|---|
| Date of mailing (day/month/year) 16 December 1998 (16.12.98) | Applicant's or agent's file reference C4-603 PCT |
| International application No. PCT/US98/05909 | Priority date (day/month/year) 28 March 1997 (28.03.97) |
| International filing date (day/month/year) 24 March 1998 (24.03.98) | |
| Applicant GOUELBO, Didier et al | |

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

09 September 1998 (09.09.98)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election
- ☒
- was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
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1211 Geneva 20, Switzerland

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Authorized officer

Lazar Joseph Panakal

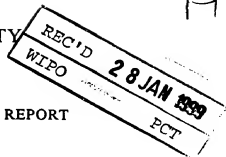
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



| | | |
|---|--|---|
| Applicant's or agent's file reference C4-603 PCT | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/US98/05909 | International filing date (day/month/year) 24 MARCH 1998 | Priority date (day/month/year) 28 MARCH 1997 |
| International Patent Classification (IPC) or national classification and IPC IPC(6): B25C 1/04; A41H 37/02 and US Cl.: 227/18, 119, 137; 292/318 | | |
| Applicant SENSORMATIC ELECTRONICS CORPORATION | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets.
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

| | |
|--|--|
| Date of submission of the demand 09 SEPTEMBER 1998 | Date of completion of this report 17 DECEMBER 1998 |
| Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230 | Authorized officer SCOTT A. SMITH Telephone No. (703) 308-2190 |

Sheila Vanecko
Paralegal Specialist
Technology Center 3700

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/05909

I. Basis of the report

1. This report has been drawn on the basis of (Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments):

- ☒ the international application as originally filed.
- ☒ the description, pages 1-10, as originally filed.
pages NONE, filed with the demand.
pages NONE, filed with the letter of _____.
pages _____, filed with the letter of _____.
- ☒ the claims, Nos. 1-11, as originally filed.
Nos. NONE, as amended under Article 19.
Nos. NONE, filed with the demand.
Nos. NONE, filed with the letter of _____.
Nos. _____, filed with the letter of _____.
- ☒ the drawings, sheets/fig 1 and 2, as originally filed.
sheets/fig NONE, filed with the demand.
sheets/fig NONE, filed with the letter of _____.
sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE.
- ☒ the claims, Nos. NONE.
- ☒ the drawings, sheets/fig NONE.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/05909

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

| | | |
|-------------------------------|--------------------|-----|
| Novelty (N) | Claims <u>1-11</u> | YES |
| | Claims <u>NONE</u> | NO |
| Inventive Step (IS) | Claims <u>1-11</u> | YES |
| | Claims <u>NONE</u> | NO |
| Industrial Applicability (IA) | Claims <u>1-11</u> | YES |
| | Claims <u>NONE</u> | NO |

2. CITATIONS AND EXPLANATIONS

Claims 1-11 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest an apparatus for securing anti-theft devices to clothing comprising a first and second magazine for first and second elements, and an assembly station including positioning and manipulation means for locating the elements and a sighting means for guiding an operator to properly position an article of merchandise. Further, the apparatus has industrial applicability since it can be made or used in industry.

----- NEW CITATIONS -----
NONE